Green Communities

Policy Summary: Created by the Green Communities Act of 2008, the Green Communities Division of the DOER is intended to help municipalities become more sustainable, control rising energy costs, and incubate the clean energy technologies and practices that will put Massachusetts cities and towns—and the Commonwealth as a whole—at the center of the 21st century clean energy economy. Envisioned as a way to encourage municipalities to make clean energy decisions, the Division is mandated to offer grant opportunities to municipalities designated as "Green Communities."

Clean Energy Economy Impacts: The five required criteria to be designated as a Green Community help municipal governments to reduce their own energy costs and help to achieve siting of wind, solar, and other renewable energy installations.

Rationale: Municipal governments are substantial consumers of fossil-fuel energy for their buildings, vehicles, street lighting, and water and wastewater treatment. An Energy Reduction Plan, along with a Fuel Efficient Vehicle Policy, are required for designation as a Green Community. These documents chart a municipal roadmap to reducing the energy consumption from municipal operations by 20 percent after five years or more. Through zoning and a streamlined approval process, Green Communities designation can have a major impact on the ability of renewable energy facilities to find suitable locations. Additionally, by adopting the "stretch" energy code (see the *Advanced Building Energy Codes* policy)—another requirement for Green Communities designation—the energy efficiency of new construction and major renovations is assured.

Policy Design and Issues: The Division provides technical assistance to all 351 MA communities to help them qualify for Green Community designation and/or to apply for other state energy grants. To become Green Communities, municipalities must meet five criteria:

- Adopt a local zoning bylaw or ordinance that allows "as-of-right-siting" for renewable and/or alternative energy generation, research & development, or manufacturing facilities;
- Adopt an expedited application and permit process for as-of-right energy facilities;
- Establish a municipal energy use baseline and develop a plan to reduce energy use by 20 percent within five years;
- Purchase only fuel-efficient vehicles for municipal use, whenever such vehicles are commercially available and practicable; and
- Set requirements to minimize life-cylce energy costs for new construction; one way to meet these requirements is to adopt the Board of Building Regulations and Standards (BBRS) Stretch Code.

The Green Communities Act allows funding of up to \$10 million per year for the designation and grant program from the proceeds of *Regional Greenhouse Gas Initiative* (RGGI) allowance auctions and other sources. The Green Communities Division also serves all Massachusetts

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cities and towns as a one-stop shop for education on the benefits of energy efficiency and renewable energy. It provides guidance and technical assistance for energy questions and projects. It promotes collaboration through shared best practices among municipalities, and funding opportunities for clean, affordable, and resilient energy projects and initiatives.

To achieve the goal of serving all municipalities, regional school districts, and water and wastewater districts in Massachusetts, the Green Communities Division offers a number of programs and services in addition to its signature Green Communities Grant Program. Other services include administering a variety of grant programs. They include, but are not limited to: funds for energy efficiency programs for customers of municipal light plants; seed funding for municipalities to hire on-staff energy managers; monies for clean energy projects at Drinking Water and Wastewater Facilities; and funding of independent third parties to aid municipalities, regional school districts, or water/wastewater districts in the study, negotiation, development and/or management of clean energy projects.

Technical assistance for energy savings performance contracting is also provided. The DOER hosts an easy-to-use web-based energy information management and reporting tool (MassEnergyInsight) that benchmarks the energy performance of all municipally owned and operated buildings, as well as streetlights and vehicles. It hosts webinars, and has created guidance documents, educational materials, and other tools to assist with energy management and efficiency efforts. The Division collaborates with electric and gas utilities to administer energy efficiency services to local and regional government entities. It provides a website and listserv for disseminating information; and employs four Regional Coordinators to provide direct support to cities and towns.

GHG Impact: GHG emissions are directly related to energy reduction and renewable energy efforts in municipalities. The current 155 Green Communities are committed to reducing their energy consumption by 2,153,992 MMBtus in five years from energy efficiency measures alone. This is equivalent to the energy used to heat and power 16,698 homes, with a resulting GHG reduction of 184,647 metric tons of CO_2e , equivalent to taking 38,866 cars off the road each year.

Other Benefits: Additional benefits include reduced energy costs, creation of a clean, affordable, and resilient energy future of the Commonwealth, and a lower burden on Massachusetts taxpayers. Projects funded through the Green Communities Division can pilot new technologies and system management. In addition, the work done by municipalities to become designated as a Green Community requires buy-in of its residents, with some of the criteria requiring a Town Meeting vote. This has resulted in a major grassroots movement to educate the larger citizenry on the benefits of reducing energy consumption and creating clean, renewable energy projects. Benefits include an uptick of local volunteer activity resulting in the establishment of new Energy Committees and hiring of on-staff energy managers. Additionally, increased municipal awareness and leadership in clean energy has led to local events such as energy fairs, and outreach programs to residents including workshops, energy saving campaigns, rebates programs for implementation of energy efficiency or renewable measures (for example, costs not covered by a Mass Save audit).

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Costs: Up to \$10 million per year, funded through the proceeds of RGGI emissions allowance auctions and other sources.

Equity Issues: There are no known equity issues. There are 155 designated communities from the Berkshires to Cape Cod, ranging in population from 392 to 645,966 residents, representing 54% of the Massachusetts population. Initial Designation Grants are based on a \$125,000 base for each designated Green Community, plus additional amounts tied to per capita income and population, and for municipalities that provide as-of-right siting for renewable energy generation. Subsequent grants are awarded on a competitive basis. Grant programs, in addition to its signature Green Communities Grant Program, support clean energy activities in municipal light plant communities, regional school districts, and other regional entities.

Experience in Other States: The Green Communities Division was the first of its kind in the nation. Several other states have consulted with DOER's Green Communities Division regarding development of similar programs. To date, we are aware of similar programs, modeled at least partially after the Massachusetts program, launched in Rhode Island and New York.

Legal Authority: The Green Communities Act of 2008 created the Division and the designation and grant program, and authorized funding for it. The BBRS approved the Stretch Code as an option for municipalities to adopt.

Implementation Issues: As of December 2015, 155 communities had attained designation as Green Communities, thereby qualifying for funding from the Division. In addition, as of December 2015, 161 cities and towns had passed the Stretch Code.

Uncertainty: As the program has seen adoption of 155 communities through 2015, there still is excitement among our cities and towns to attain the Green Community Designation. It will be important in the coming years to continue to engage the remaining 196 communities to achieve the goal of 351 Green Communities, a fully clean and green Commonwealth. Additionally, many of the current Green Communities are eager to reach beyond the existing goal of reducing their municipal energy use by 20 percent in five or more years in order to bring clean energy opportunities to their residents and businesses and to pursue additional greenhouse gas emission reductions.

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